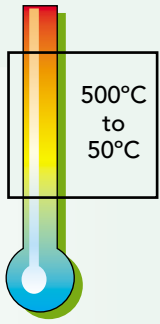


Low Temperature

Furnace 17701



The Isotech Low Temperature Fixed Point Furnace is designed specifically to realize and maintain the freeze plateaux of Isotech Indium, Tin and Zinc Fixed Point Cells, for calibration of thermometers on the International Temperature Scale of 1990.

The Low Temperature Furnace is a single-zone furnace.

The recommended procedure for establishing a freeze plateau requires operator attention until the plateau is realized. Following that, the Model 17701 Furnace will maintain the indium or the tin plateau, essentially automatically, for a period of 10 to 12 hours and the zinc plateau for 6 to 8 hours.

1. The furnace core, into which the freeze-point cell is inserted, is of aluminium alloy, which provides a very low thermal gradient along the core length. The main furnace heater is of the parallel-tube design as used at NIST. A pre-warming tube is provided.

2. An advanced proportioning electronic control system regulates furnace temperature, using a platinum resistance thermometer as sensing element. The control may be calibrated in-situ using Freeze Point Cells as references.

Two entirely independent over-temperature safety devices are included. A dedicated (on-off) over-temperature control circuit provides active safety. A fusible link in the main power circuit provides passive safety.

3. The Low Temperature Furnace is completely self-contained, castor mounted and requires no external supplies (except power).

*Fixed Points of: Indium 156.5985°C, Tin 231.928°C, and Zinc 419.527°C, 6 to 12 Hours Plateau
Annealing Adaptor, Active and Passive Safety Circuits*



Model	ITL-M-17701
Temperature Range	50°C to 500°C
Accuracy	see page 15 for details
Control	0.1°C Resolution
Communications	Included as standard, see page 42 for details
Power	1.5kW, 108-130 or 208-240VAC, 50/60Hz
Dimensions	Height 960mm Width 600mm Depth 560mm
Weight	115kg

Options

411-01-11	Annealing Adaptor
824-01-00	Fan Assembly

How to order

ITL-M-17701

Please specify voltage required